#### **DEPARTMENT OF THE ARMY**



OFFICE OF THE CHIEF OF ENGINEERS WASHINGTON, D.C. 20310-2600

REPLY TO

CECW-P (1105-2-10a)

16 May 2003

SUBJECT: Denver County Reach, South Platte River, Denver, Colorado

#### THE SECRETARY OF THE ARMY

- 1. I submit for transmission to Congress my report on the study of ecosystem restoration on the Denver County Reach, South Platte River, Denver, Colorado. It is accompanied by the report of district and division engineers. These reports are in response to a resolution adopted 21 June 2000 by the Committee on Transportation and Infrastructure of the House of Representatives, requesting review of the report of the Chief of Engineers on the South Platte River and Tributaries, Colorado, Wyoming, and Nebraska, published as House Document 669, 80<sup>th</sup> Congress, and other pertinent reports, to determine whether any modifications of the recommendations contained therein are advisable. Preconstruction engineering and design activities for this project will be continued under the cited authority.
- 2. The reporting officers recommend the national ecosystem restoration (NER) plan, which consists of removal of a low head Fabridam; construction of a 250 cubic-feet-per-second, low-flow channel; stripping vegetation; modification of overall channel banks; construction of a series of pool/riffle structures and diversion jetties; relocation of existing trails; relocation of utilities; and complete revegetation of the project area with native species. To allow continued operation of the existing Zuni Power Plant, construction of an infiltration gallery and purchase of water rights as necessary are included as just compensation for removal of the Fabridam. No fish and wildlife mitigation is required.
- 3. The estimated first cost for construction of the recommended plan, based on October 2002 price levels, is \$17,997,000. In accordance with Section 210 of the Water Resources Development Act of 1999, the ecosystem restoration project will be cost shared 65 percent Federal and 35 percent non-Federal. The estimated Federal cost of the project is \$11,698,000 and the estimated non-Federal cost is \$6,299,000. Total average annual charges, based on a discount rate of 6.125 percent and a 50-year period of economic analysis, are estimated to be \$1,270,000. The non-Federal sponsor would be responsible for the operation, maintenance, replacement,

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repair, and rehabilitation (OMRR&R) of the project, at an average annual cost currently estimated at approximately \$20,000.

- 4. The City and County of Denver has accomplished much towards restoring the environmental assets of Denver's South Platte River corridor. Only the Zuni to Sun Valley reach, which includes the Zuni Power Plant and the Sun Valley housing development, remains in a severely degraded condition. The recommended NER plan will restore 15 acres of fish and wildlife habitats along one mile of the stream corridor of the South Platte River and approximately 600 feet of Weir Gulch, a west bank tributary in the upstream portion of the project. There will be a net gain of approximately 3 acres of wetland. Removal of the Fabridam/backwater and construction of the low flow channel will result in the development of wetlands on the edges of the low flow channel and approximately 9 acres of riparian habitat in an area 30 to 50 feet wide on both sides of the low flow channel. The wetlands and riparian areas would buffer the movement of pollutants to the river from upland areas. Restoration of Weir Gulch will tie in with the bank modifications on the South Platte River at its confluence. Bank modifications and regrading for approximately 600 feet upstream on Weir Gulch will help to reduce head cutting conditions and will generate additional quality riparian habitat connectivity to the South Platte River corridor. With implementation of all recommended restoration features, the project area will experience a significant increase in native plants and fish habitat and a decrease in nonnative plants and noxious weeds. These restorations will result in a productive, sustainable and biologically diverse fish and wildlife community, that will significantly contribute to the unrestricted movement of aquatic and riparian species along a 35-mile reach of the South Platte River through Metropolitan Denver, both upstream and downstream of the current Fabridam location. Numerous fish and wildlife species are expected to benefit from the project, including migratory waterfowl and fish-eating birds, riparian songbirds and mammals, and native fishes.
- 5. To ensure that an efficient environmental restoration plan was recommended, cost effectiveness and incremental analysis techniques were used to evaluate alternative restoration plans. The cost of the recommended environmental restoration plan is justified by the restoration of about 15 acres or 14.96 habitat units and provides for achieving habitat increases in the most cost-effective manner. The restored habitats are considered especially valuable due to scarcity and dependence of certain species on these resources.
- 6. Washington level review indicates that the plan recommended by the reporting officers is technically sound, economically justified, and environmentally and socially acceptable. The proposed project complies with applicable U.S. Army Corps of Engineers planning procedures and regulations. Also, the views of interested parties, including Federal, State and local agencies, have been considered.
- 7. I concur in the findings, conclusions, and recommendations of the reporting officers. Accordingly, I recommend that ecosystem restoration on the Denver County Reach, South Platte River, Denver, Colorado, be authorized generally in accordance with the reporting officers' recommended plan, and with such modification as in the discretion of the Chief of Engineers may be advisable. The recommendation is subject to cost sharing, financing, and other

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applicable requirements of Public Law 99-662, as amended by Section 210 of Public Law 104-303. Project cost sharing for environmental restoration under this act requires a non-Federal sponsor share of 35 percent and a Federal share of 65 percent. Further, the non-Federal sponsor would be responsible for 100 percent of the cost of operation and maintenance of the project. The recommendation is also subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies, including the following requirements:

- a. Provide 35 percent of the separable project costs allocated to environmental restoration, as further specified below:
- (1) Enter into an agreement which provides, prior to execution of a project cooperation agreement for the project, 25 percent of design costs;
- (2) Provide, during construction, any additional funds needed to cover the non-Federal share of design costs;
- (3) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the construction and OMRR&R of the project;
- (4) Provide or pay to the Government the cost of providing all retaining dikes, waste-weirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the project; and
- (5) Provide, during construction, any additional costs as necessary to make its total contribution equal to 35 percent of the separable project costs allocated to environmental restoration.
- b. For as long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, at no cost to the Government, in accordance with applicable Federal and State laws and any specific directions prescribed by the Government in the OMRR&R manual and any subsequent amendments thereto.
- c. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land that the non-Federal sponsor now or hereafter owns or controls for access to the project for the purpose of inspection, and if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project.
- d. Comply with Section 221 of Public Law 91-611, the Flood Control Act of 1970, as amended, and Section 103 of Public Law 99-662, the Water Resources Development Act of 1986, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal

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sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element.

- e. Hold and save the Government free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.
- f. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs.
- g. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction, operation, and maintenance of the project; except that the non-Federal sponsor shall not perform such investigations on lands, easements or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.
- h. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements or rights-of-way that the Government determines necessary for the construction, operation, and maintenance of the project.
- i. To the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA.
- j. Prevent future encroachments on project lands, easements, and rights-of-way which might interfere with the proper functioning of the project.
- k. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way and performing relocations for construction, operation, and maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.
- 1. Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

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- m. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement.
- n. Not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.
- 8. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities in the formulation of a national civil works construction program nor the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to the Congress, the City and County of Denver (the non-Federal sponsor), the State of Colorado, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.

ROBERT B. FLOWERS

Lieutenant General, U.S. Army

Chief of Engineers